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Chair

Mr. Dan Ruimy

Standing Committee on Industry, Science and Technology

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● (1625)

[*English*]

The Chair (Mr. Dan Ruimy (Pitt Meadows—Maple Ridge, Lib.)): I call the meeting to order.

As with most things in the House of Commons, sometimes it's unavoidable and we have things that are happening, and today we had votes, so we're just going to go straight into our meeting.

We have with us today, as we continue our statutory review of the Copyright Act, from the Entertainment Software Association of Canada, Jayson Hilchie, president and chief executive officer. From Element AI, we have Paul Gagnon, legal adviser. From BSA The Software Alliance, we have Christian Troncoso, director of policy. From the Information Technology Association of Canada, we have Nevin French, vice-president of policy.

You will all have seven minutes to give your presentation. If you can make it quicker than seven minutes, then we can get everybody on record.

We're going to get started right away with Jayson Hilchie, from the Entertainment Software Association of Canada.

Mr. Jayson Hilchie (President and Chief Executive Officer, Entertainment Software Association of Canada): Thank you, Mr. Chair.

Thank you to the committee for the opportunity to participate in this study today.

Again, as stated, my name is Jayson Hilchie, and I'm the president and CEO of the Entertainment Software Association of Canada. The ESAC represents a number of leading video game companies with operations in this country, from multinational publishers and console makers, to local distributors and Canadian-owned independent studios.

Canada's video game industry is one of the most dynamic and prolific in the world. We employ close to 22,000 full-time direct employees, while supporting another 19,000 indirect jobs. Our industry's contribution to Canadian GDP is close to $4 billion, and this is not revenue. These are salaries of our employees, those who our industry supports, along with their collective economic impact, and our impact is considerable. With only 10% of the U.S. population, Canada's video game development industry is roughly half the size of the U.S. industry, which is the world's largest, so I cannot stress enough how important Canada is within a global context with respect to the production and the creation of video games.

Many of the most successful games globally are created right here in Canada. Like many other IP-based industries, piracy is still an issue for us and we have to innovate constantly to battle it. One of the ways we have combatted piracy is to move to a model where most of the games we produce have some sort of online component. This involves creating an account that enables content to be downloaded from a central server or, more commonly, including a multi-player mode within the game. This is very effective in limiting the ability of counterfeiters to flourish as pirated games will not be able to access the online functions that are offered. The only content the player accessing the pirated game will be able to use, in most cases, will be the single-player mode, which within our industry is becoming less and less common.

In addition to making games that have this online functionality I just spoke about, our industry uses technological protection measures to combat piracy, both in the form of software encryption technologies and physical hardware found in video game consoles. These technological protection measures essentially do two things: They work to encrypt the data on a game which thwarts copying it, and they make copied games unreadable on the hardware console. While in many cases these measures do eventually fall victim to committed pirates who work to crack the game, they provide a window for the company to sell legitimate copies during the period of most demand, which is often the first 90 days.

As encryption technology improves, it's taking longer and longer for the pirates to crack the game, which improves and lengthens the window a company has to recoup their investment in their product. In some cases, those who sell what we refer to as "modchips" offer their services online with the promise to allow your console to circumvent the protections found within it and play copied games. These circumvention devices were made illegal in Canada in 2012 as part of Canada's Copyright Modernization Act.

In fact, just last year, Nintendo used Canada's copyright law to successfully sue a Waterloo, Ontario, company that was selling circumvention devices online. After a lengthy process, Nintendo was awarded over $12 million in damages, and multiple media outlets reported the ruling in Federal Court affirmed Canada's copyright law as one of the strongest in the world.

The Copyright Modernization Act has proven effective by providing protections to content creators in the games industry. As our economy moves increasingly to one that involves digital goods and services, it's critical that these protections remain in place. However, we can also do more to ensure that consumers understand the impacts of piracy.

The notice and notice regime in its purest form has intentions to do this, but notices are not consistently forwarded from ISPs as is required, and consumers who receive those notices often do not understand them or ignore them. We believe there's an opportunity for the Government of Canada to work with ISPs to ensure that the notice and notice regime is properly enforced and utilized. Ensuring that these notices of infringement are regularly and consistently forwarded by ISPs is the most effective way to increase accountability and promote awareness and education opportunities for those who are infringing content, intentionally or otherwise. By better educating people about the harms of piracy, we can work to improve conditions for creators of all types.

Thank you very much.

The Chair: Excellent. Thank you very much.

We're going to move to Paul Gagnon from Element AI, please. You have up to seven minutes.

Mr. Paul Gagnon (Legal Advisor, Element AI): I have up to seven minutes.

[*Translation*]

Thank you, Mr. Chair.

My thanks to all the members of the committee.

My name is Paul Gagnon. I am a legal advisor with Element AI. I deal with matters of intellectual property and data.

[*English*]

I'll give the testimony on behalf of Element AI in English, although I welcome questions in French in the later stages of today's hearing.

Thank you for giving us the opportunity to speak today. Element AI is a Montreal- and Toronto-based artificial intelligence product company. We're celebrating two years of activity shortly and making headlines all across the world with offices in London, Singapore and Seoul.

It's a great privilege to come before you today, especially as an IP geek. It's a great occasion to come in and comment on copyright reform.

Element AI is bringing fundamental research as quickly as possible into actionable products and solutions for companies. Our momentum is favourable. We're quite proud of our achievements, but the best is yet to come, which is why we're here. We want to discuss how Canada's place as a world leader in AI is not guaranteed. We'd like to invite limited and targeted reform within the Copyright Act, in order to clarify a specific use case around informational analysis, also known as text and data mining.

This lack of certainty around the act impacts a very important activity for the development of artificial intelligence. This informational analysis, within the context of fair dealing, would be beneficial for all Canadians and more specifically as well, those who are active in the sector of AI.

This targeted exemption would help us secure a predictable environment for AI, in order for it to maintain its unprecedented growth. Competition in AI is global. Other countries are actively building policy tools to draw in investment and talent. We urge Canada to do the same.

When we speak to informational analysis, what are we referring to? We're talking about analysis that can be made of data and copyrighted works, in order to draw inferences, patterns and insights. This is informational analysis, not the use of the works themselves, to draw from them and use and extract information from these works. It's distinct from using the works themselves. It's about abstraction. It's not about commercializing the works themselves and undercutting Canadian rights holders.

As a quick example, if we were to look at the paintings in this building when we walked in, it's not about taking pictures of these paintings and making T-shirts. It's about looking at the paintings themselves and drawing patterns, measuring distances and measuring the colours and tones that are used by artists.

To use another example which is more relevant to your day-to-day work in Parliament, if you were to look at the Hansard debates and use them for informational analysis, we wouldn't be binding books and selling the debates. Perhaps we'd be using translated words to build more functional algorithms to translate works. We see that here there's an abstraction. It's not the work itself; it's the information that we can derive that's used.

Data is truly the fuel that powers the engine of AI. Algorithms in AI-based products need diverse, representative and quality data. That is the supply chain around AI to provide actionable insights and data, in order to provide better products and services.

A good old expression in computer science is garbage in, garbage out. This truly applies to artificial intelligence and informational analysis. Our AI will only be as good as the data we provide to it. Therefore, the targeted exemption we want to speak about today aims to broaden this scope, in order for our AI to be quality, representative and in turn, made accessible for Canadians everywhere.

We think that with a clearer right and resolving the legal uncertainty around informational analysis, we can drive fairness, accessibility and inclusion of AI-based solutions. Really, better data means better AI.

Under the current Copyright Act, how is informational analysis understood? How is it apprehended? The Copyright Act protects copyrighted works, but it also protects compilations of copyrighted works and also compilations of data. There are three fronts that are protected.

As you've seen in the works of the standing committee, the Copyright Act is about balancing different interests, users' rights and access, but also rights holders, which is why we suggest that informational analysis be made part of the fair dealing exemptions.

Fair dealing exemptions are limited in purpose. The act clearly states the purposes around what kind of intention we can bring to analysis we can draw, for example, research use, private study or news reporting. Where there's an overarching public interest, the act has clarified that there's a clear purpose that's permitted within fair dealing.

● (1630)

Informational analysis, as we've explained it, how is it apprehended as the act exists today? It's not clearly addressed, and so there's legal uncertainty around this. We could look perhaps to the temporary reproduction exemption, but that doesn't quite fit. If you turn to specific fair dealing exemptions, research, private use, this isn't clear. We think it's within reach of Parliament to clarify this, and in turn help drive investment and certainty for Canada's AI sector.

If we look at research purposes more specifically, the uncertainty here is quite impactful. Indeed, it could permit the informational analysis itself under research, but there's clear uncertainty as to whether we can leverage this research into products and solutions. Relying on solely the research exemption might not be enough.

We suggest this exemption not be limited to the identity of the specific entities conducting this informational analysis. Truly, if you look at research around AI, the public sector is quite active, as is the private sector. At Element AI, we collaborate every day with researchers at universities across Canada. If we were to clearly exclude commercial entities such as ours to perform this research, it would fundamentally misapprehend the nature of research in Canada.

What's the impact of this uncertainty? In time, if we do not bring this additional added clarity to informational analysis, it can have real and practical impacts on Canada's competitiveness in the AI sector. It can deter R and D investments, and create risks for businesses. Not having legal clarity around informational analysis disproportionately impacts startups and SMEs. Why? As we all know, certainty and predictability are the currency for our entrepreneurs. On the other hand, big players have deep pockets to litigate and fight through this uncertainty. We might not have this luck for our startups and SMEs.

Should we wait for this to be litigated in court and clarified downstream two or three years on? We don't think so. There's a great opportunity to clarify this now.

We often hear that we live in the age of big data, which is true. In terms of volume, there are massive amounts of data generated every day, but there's a huge data gap. Because we generate that data, it doesn't make it accessible to smaller players. Indeed, there's a huge gap between who controls and has access to this data. To ensure the competitiveness of our SMEs, our startups and our more established companies, it's essential to make sure there can be clearer access to this data in order to bridge this data gap in order for this chasm between Internet giants not to be broader.

Why informational analysis fits well under the fair dealing exemption is it benefits from past interpretation of the courts. It's a clear framework, and it's one that aims for fairness. Through case law, it has established clear criteria we can rely upon. Those criteria are flexible and adaptable to different use cases.

Fundamentally, copyright protects the expression of ideas and information, not information and ideas as such. It's a fundamental principle of copyright law. Fair dealing, in this context, especially for informational analysis, brings a clear fence that is quite reasonable, and clearly brings more certainty to our private sector.

The key point here is that an exemption for informational analysis can help democratize access to data and create certainty for the emerging AI industry. In turn, this will help maintain Canada's leadership role as a global hub for AI.

Thank you.

● (1635)

The Chair: Thank you very much.

We're going to move to Christian Troncoso from BSA The Software Alliance.

Mr. Christian Troncoso (Director, Policy, BSA The Software Alliance) Good afternoon, Mr. Chair, vice-chairs and distinguished members of the committee.

My name is Christian Troncoso and I'm the director of policy for BSA The Software Alliance.

BSA is the leading advocate for the global software industry before governments and policy-makers around the world. Our members are at the forefront of software-enabled innovation that powers the global economy and helps businesses in every industry compete more effectively.

Because copyright policy is a critical driver of software innovation, we're deeply appreciative for this opportunity to appear before the committee today.

This committee's review of the Copyright Act comes at a very timely moment.

With the recent announcement of the pan-Canadian artificial intelligence strategy, Canada has staked out an ambitious goal of becoming a global leader in the development of AI. This committee has a critical role to play in helping realize that vision.

To become a global leader in AI, Canada will need to set in place a policy environment that will enable its R and D investments to flourish. One critical competitive factor will be access to data. AI research often requires access to large volumes of data so that software can be trained to recognize objects, interpret texts, listen and respond to the spoken word, and make predictions. Ensuring that Canadian researchers can compete with their counterparts in other AI leading nations will therefore require careful examination of government policies that affect their ability to access data. Copyright is one such policy.

As currently enacted, the Copyright Act may place Canadian researchers at a disadvantage relative to their international competitors. For instance, unlike the U.S. and Japan, the Canadian copyright system creates uncertainty about the legal implications of key analytical techniques that are foundational to the development of AI. This committee can shore up the legal foundations for Canada's investments in AI by recommending the adoption of an express exception to copyright for information analysis.

Many of the most exciting developments in AI are attributable to a technique called machine learning. Machine learning is a form of information analysis that allows researchers to train AI systems by feeding them large quantities of data. This so-called training data is analyzed for the purposes of identifying underlying patterns, relationships and trends that can then be used to make predictions about future data inputs.

For instance, developers have created an app called Seeing AI that can help people who are blind or visually impaired navigate the world by providing audio descriptions of objects appearing in photographs. Users of the app can take pictures with their smart phones and the Seeing AI app is able to translate for them, through an audio description, what is occurring in front of them. To develop the computer vision model capable of identifying those objects, the system was trained using data from millions of photographs, depicting thousands of the most common objects we encounter on a daily basis, such as automobiles, street crossings, landscapes and animals.

It would be understandable if you were wondering right now what any of this has to do with copyright. The uncertainty arises because the machine learning process may involve the creation of machine readable reproductions of the training data. In some instances, the training data may include works that are protected by copyright. In the case of Seeing AI, that would be the millions of photographs that were used to train the computer vision model to identify common objects.

To be clear, the reproductions that are necessary for machine learning are used only for the purposes of identifying non-copyrightable information from lawfully accessed works. However, the Copyright Act currently lacks an express exception to enable that type of informational analysis. Therefore, there is considerable uncertainty about the scope of activity that is permitted under current law. This uncertainty poses a risk to Canada's AI investment, and provides a competitive advantage to those countries that provide firmer legal grounding for AI development.

Japan is one such example. In 2009, Japan passed a first of its kind exception for reproductions that are created as part of an "information analysis" process. Earlier this year, the Japanese diet amended the exception to make it more broadly applicable for AI research. Analysts now credit these legal reforms for transforming Japan into what they call a machine learning paradise.

In the U.S., courts have also confirmed that under the fair use doctrine, incidental copying to facilitate informational analysis is non-infringing. In September, the European Parliament voted in favour of a new copyright provision that would provide member states with the flexibility necessary to create broad exceptions for information analysis. Singapore and Australia are currently considering the adoption of similar exceptions.

● (1640)

These developments reflect an emerging consensus that the creation of machine readable copies for purposes of information analysis should not be considered copyright relevant acts. Copyright protection was never intended to prevent users from analyzing a work to derive factual, non-copyrightable information, so it makes little sense for copyright law to prevent such an analysis merely because it's being performed by a computer.

To ensure that Canada's significant investments in AI will pay dividends long into the future, the Copyright Act should be modernized to provide legal certainty for this common sense proposition.

The reproductions that are made in the course of training AI systems are unrelated to the creative expression that copyright is intended to protect, are not made visible to humans, and do not compete with or substitute for any of the underlying works. In other words, exception for information analysis poses no risks to the legitimate interests that copyright is intended to protect.

Copyright is ultimately intended to provide incentives for the creation of new works. An exception for information analysis advances this objective by stimulating the creation of new research and enabling the discovery of new forms of knowledge. By recommending the adoption of this exception, this committee will ensure that the Copyright Act remains fit for purpose in an age of digital intelligence.

Thanks, and I look forward to the questions.

The Chair: Thank you very much.

From the Information Technology Association of Canada, we have Mr. French.

You have up to seven minutes.

● (1645)

Mr. Nevin French (Vice-President, Policy, Information Technology Association of Canada): Chair and honourable members of the committee, it's a privilege to be here today on behalf of the Information Technology Association of Canada, also known as ITAC, to discuss the review of the Copyright Act.

ITAC is the national voice of Canada's ICT industry, an industry that includes over 37,000 companies, generates over 1.5 million jobs and contributes more than $76 billion to the economy.

In today's world, technology can and is outpacing our laws and regulations, and it's crucial that Canada as a global leader does not fall behind.

Today, I'd like to address how the copyright review will fit into the bigger picture of the digital economy in Canada. I'll focus on machine learning and artificial intelligence, and the ways in which copyright rules and regulations will be impacted.

Copyright plays a crucial role in protecting owners while promoting creativity and innovation, which is vitally important when it comes to the tech sector. The key is finding the balance between protecting the rights of the creator with the ability of users to access and benefit from their creation. The difficulty is maintaining the balance between both ends of the spectrum. Otherwise, the entire balance of the digital economy will suffer. In short, we need to get this policy right.

Let's take a quick look at Canada's technology landscape. This has been an exceptional year of investments in Canadian technology, with unprecedented job growth, sizable FDI and several Canadian tech firms going global.

In today's economy, a tech job could be in almost any sector. Many tech-related jobs are no longer just about computer science or programming. It's now about combining anything you're passionate about with technology. This includes health care, the environment, energy, mining, agriculture, the creative arts, as well as core tech jobs like cybersecurity, networking and data analysis.

This is why ITAC has worked with post-secondary institutions to create business technology management programs that blend training in business and tech. This is important because the battle for tech talent is now fought on a global scale, and Canada is in a unique position and is viewed as a leader. That's one of the reasons so many big-name tech investments are taking place across the country. Technology and its application in cutting-edge fields is no longer a domestic feel-good story, and Canada is a serious player in the digital world economy, a destination for investment and a world leader in artificial intelligence.

Over the past year, global talent has been strongly flowing into Canada, including from the U.S. That is something unforeseen not too long ago. Almost every city in Canada has tech incubators, and there are many examples of massive global tech firms investing significantly in tech jobs. Equally important, there is domestic technology growth going on here as well, owing to increased access to talent and venture capital, and public support for small business. This adds to a combination of competitive tax rates, business costs, and a strong economy, which form an environment that is ready for success.

A key reason for this success is that we have the right approach to copyright, a very balanced approach, and this should continue. The act is working. We need to be careful about recommending sizeable changes that may have unintended consequences to other industries. The tech industry believes that the 2012 review was a successful and important factor in the growth of the Canadian tech sector.

There's no escaping the reality that technology has changed our world forever, and the sheer amount of data that exists, and will grow, will require the use of machines to be able to sort that data. Computers far surpass humans' ability to quickly download and process data, but when they are used in conjunction with human thought and intuition, the way we work, learn, and grow, and the ways we navigate the world around us can be done so much more efficiently.

As I said at the outset, our role as a national industry association is to work closely with our members, so we reached out to them to ask about copyright concerns, and they all named artificial intelligence, or AI, and machine learning.

Canada needs to match its vision of being a leader in AI with a policy framework that supports AI development and commercialization. This requires policies that promote access to data, and broad access to data is fundamental to AI. AI research and products need large quantities of data so that software can be trained to interpret text, recognize patterns and make predictions. Broad access to data is also needed to mitigate the risk of bias in AI solutions.

● (1650)

The importance of access to data has been recognized in other countries, including the U.S. and Japan, where copyright laws explicitly allow for the reproduction of copyright-protected works to facilitate information analysis by computers.

If Canada does not amend the Copyright Act to provide a similar exemption to infringement, it's reasonable to predict that we'll fall behind these other countries with AI talent and investment capital migrating to more favourable jurisdictions. We need to be clear: Adding an exemption for information analysis does not undermine the interests of content owners. The right to read, understand and analyze information data has never been subject to control under copyright laws. Using a computer to learn more efficiently, when compared to manual reading, viewing or observing works, does not implicate the rights of owners. Owners will continue to control access to their works.

Today there's a global AI race as other countries are trying to catch up and surpass Canada in this industry. Just because Canada is seen as a global leader, we cannot rest on our laurels. For years we've said, "If only we can convert our reputation from being pure researchers into developing business." Well, AI is one of these opportunities. We do not want a chilling effect on the growth of AI in Canada, especially right now, and poor policy choices will especially impact and harm small firms, which are the backbone of our economy. If we do not enable broad access to data, SMEs and start-up firms will be impacted the most. These enterprises and firms will have little or no data on their own, making access to published works and data critical to their research and commercialization efforts.

Broadly, this is what we propose: that the committee acknowledge that the Copyright Act does not implicate the copying of lawfully accessed works for AI purposes and the committee recommend that a new exception be added to the Copyright Act to clarify that copying, analyzing and using lawfully acquired works and data to develop new knowledge does not require authorization of the copyright owner. If we want Canada to maintain an industry leadership position in AI, we need to get this policy right.

ITAC has traditionally called on government to better engage the tech community in the development of policies and, frankly, we're pleased to say that government, including this committee, is doing more and more of this. Industry can provide insight and share knowledge and expertise, which is especially important with new technologies.

How can government support the growth of the technology industry? It does not need to be direct funding, although that can help. It can also be setting the policy framework that strikes the right balance. As Canada continues to grow the tech sector, access to data is one variable, along with financial capital, talent and commercial opportunities, that can help ensure that investments continue.

We believe that the global best practice can be applied to the copyright review. The act has a mandatory review every five years; however, technology will continue to outpace the speed of legislation. Thus, we're looking for changes to copyright, but we're looking for a surgical approach. The committee has been assigned a very tough job, and it will be very hard to try to please everyone. However, our overarching message is that the act needs a surgical update and, frankly, will need a scalpel going forward, not a hammer, given the rate of change.

In closing, I'd like to thank the committee for the extensive consultations they've done thus far.

Thank you for the opportunity to present our industry's perspective.

The Chair: Thank you very much.

Being mindful of the time, we're going to jump right into questions.

Ms. Caesar-Chavannes, you have seven minutes.

Mrs. Celina Caesar-Chavannes (Whitby, Lib.): Thank you very much.

Thank you to each of the witnesses.

I will direct my first set of questions to Mr. Hilchie.

What is the current cost to you related to piracy within the gaming industry? Do you have any idea?

Mr. Jayson Hilchie: It's always been a challenge to quantify that number. We know how much we sell legitimately, but we're not able to put a number on the legitimate copies sold versus those that have been pirated, but it's large. It's mainly much larger now toward cloning and mobile games. Mobile games are now being cloned, and cheats and things like that exist online. If you're looking for an exact number, I'm unable to give that to you.

Mrs. Celina Caesar-Chavannes: That's okay.

We know this is a growing industry. We have some students here from Algonquin College and I have students in my riding at UOIT who are part of a growing set of students going into gaming. I told them I'd give them a shout-out.

I'm just wondering if I could have a better understanding of the impacts of continued piracy, especially when you look at gaming being used for things like health care or other industries that are not particularly just somebody in their home in front of a computer playing a game. What are some of the impacts of copyright when we look at privacy issues or the impact on future developments when you use games for something outside of the gaming industry, for example, health care?

● (1655)

Mr. Jayson Hilchie: Your first question, I believe, is about the impact of copyright on smaller video game companies trying to make it within the video game industry. There are about 600 video game companies in Canada. We're producing over 2,100 different products a year. The vast majority of those products are coming from small, independent studios of two to five people who are making games that they self-publish on the App Store on a mobile device. They are making these either with self-financing or bootstrapping or whatever.

Discoverability in our industry is one of the most difficult things we're dealing with because so many games are coming out all the time that they're hard to find.

First, it's very difficult to make money in video games and independent video game production if you're trying to sell games legitimately. Anything that ends up pirated is confounding that situation even more.

With respect to copyright along the lines of the way our industry is moving toward more serious industries, such as aerospace or health care, and even AI, we're a heavy player within the development of some of the user interfaces within self-driving cars and things like that. I'm unaware of any type of copyright implications that would cause issues with that. We create some programs that end up being used in serious purposes outside of the entertainment industry, but we also partner with universities and with other independent technology companies, for medical device purposes and so forth. I can only assume that those organizations are going through the proper channels for approval in copyright so I'm unaware.

Mrs. Celina Caesar-Chavannes: That's perfect. Thank you.

To the AI guys, I want to start by saying that I understand the need to stay competitive and for Canada to be a leader in this domain, which all three of you very clearly stated in your testimony.

Do companies profit from the abstractions or the predictions that AI produces?

Mr. Paul Gagnon: The goal is to develop tools that ultimately indirectly are fed off and developed by access to that data. I use the expression "supply chain". At the beginning, you have fundamental techniques, algorithms and basic hunches, of how to build the product or provide a solution.

If you want specific examples, we can think of development of tools for the environment. We want to develop a tool that can better predict local weather patterns, perhaps tornadoes in the Ottawa area. That's a great topic of note recently. In agriculture, you could want to develop tools that improve crop yields or get smarter about environmental impacts. From there you're going to look at diverse data sources to develop tools. Maybe the deciding factor is when to sow seeds in a field. That's what the algorithm is going to look for. It will come from diverse sources of information to get to that answer.

That's where AI is truly powerful because it can combine and apply this wide-ranging data and then come to a more digestible answer in a way that human minds cannot necessarily do.

Mrs. Celina Caesar-Chavannes: At some point there is some degree of profitability from the tools that are made from the predictions. Is that correct?

Mr. Paul Gagnon: Right.

Mrs. Celina Caesar-Chavannes: If you're mining this data and there is copyrighted material within that data, then who along the supply chain provides that compensation to the owner?

Mr. Paul Gagnon: That, I think, is a point. There's a market failure around this because it's so voluminous.

Mrs. Celina Caesar-Chavannes: Okay.

Mr. Christian Troncoso: I think it's important to think about it in everyday terms. If I read a book on how to invest in the financial markets, and I make a lot of money, I don't think anyone would assume that I owe part of those profits to the author of that book. We don't generally assume that any time a work was used in some way that generates any sort of profits for anyone, that the author is necessarily owed financial compensation.

I think the AI we're—

● (1700)

Mrs. Celina Caesar-Chavannes: But the person paid for the book.

Mr. Christian Troncoso: Certainly.

I think it's very important to make the point.... I won't speak for anyone else. Speaking for me, we're not seeking an exception to get access to new forms of works. We are perfectly prepared to pay. That is fine. But once a company has obtained and paid for access to a work, they should be able to analyze those works much as you do when you read a book that you bought from a store.

The Chair: Thank you very much.

We're going to move to Mr. Albas.

You have seven minutes, please.

Mr. Dan Albas (Central Okanagan—Similkameen—Nicola, CPC): Thank you, Mr. Chair.

I'm going to exercise the motion that I have on deck in regard to what I said at committee. I'm going to ask the indulgence of members and our witnesses, and I'm going to be as brief as I can, because I think it's important to get this out of the way. Hopefully, the members will support it.

For members who don't have it in front of them, the motion is as follows:

> To assist in the review of the Copyright Act, that the Standing Committee on Industry, Science and Technology request Ministers Freeland and Bains, alongside officials, to come before the committee and explain the impacts of the United States-Mexico-Canada Agreement (USMCA) on the intellectual property and copyright regimes in Canada.

First of all, it is challenging for the clerk and the chair to be able to get the ministers. We have Thanksgiving, and we don't have a lot of time before we rise for the Christmas break.

I hope that members would support this motion. There's a lot that's in this new agreement, and I think it impacts our work that we're doing here today.

I would ask for members' support in this request.

The Chair: Mr. Sheehan.

Mr. Terry Sheehan (Sault Ste. Marie, Lib.): Thank you very much, Mr. Chair.

Thank you very much for the motion.

Of course, the information is being discerned right now and will be debated in the House, so what I'm saying is perhaps we do it later but not right now.

I can't support it right now, but at some point in time we'll be taking a look at various aspects of the new USMCA.

Thank you.

The Chair: Thank you.

Mr. Jowhari.

Mr. Majid Jowhari (Richmond Hill, Lib.): Mr. Chair, I move to adjourn the debate.

The Chair: That's non-debatable, so we'll go to a vote for that.

Mr. Brian Masse (Windsor West, NDP): Really?

I don't think that's—

The Chair: It's non-debatable.

I don't understand what the concern is. It's non-debatable, so we go to a vote on that.

Hon. Michael Chong (Wellington—Halton Hills, CPC): On a point of order, Mr. Chair, having chaired House of Commons committees before, my recollection of a dilatory motion is to adjourn the committee, not to adjourn debate.

I never recall a situation where a member of a committee was permitted to move a motion to adjourn debate on a motion. That would be considered a dilatory motion.

My understanding that adjourning a committee is non-debatable, it being a dilatory motion, but not to adjourn debate on a motion in front of the committee.

The Chair: It is a dilatory motion. This has happened in our committee on numerous occasions.

We don't adjourn the committee. We adjourn debate on that motion, and that's what was called. It is non-debatable.

If you'd like, the clerk can explain that to you.

Mr. Masse.

Mr. Brian Masse: For clarification, technically I suppose it might be right, but that would be breaking from the more collegial approach at this committee. The Liberals want to shut down even the interest of allowing people to have an intervention.

Perhaps you might be right on the technical aspect of it, but it clearly sends a message to members like me, who can't even participate for a moment in something that is put on the table.

Perhaps you will be ruling in favour of this, but it is a technical thing. It's certainly counter to the history of this committee and what we've worked towards.

The Chair: Mr. Masse, I would agree.

I think part of the challenge is that we have witnesses in front of us with very limited time because of the votes. There has not been a vote to shut this down.

As Mr. Sheehan said, there is not adequate time today to debate that.

Again, we do have witnesses in front of us with limited time.

We've always tried to operate in a collegial way, and I want to make sure that you have your time with the witnesses as well.

It is a non-debatable motion.

● (1705)

Mr. Dane Lloyd (Sturgeon River—Parkland, CPC): On a point of order, Mr. Chair, it is my understanding that we can bring this debate up at the next meeting when we have more time.

The Chair: You certainly may.

There are two choices here: you either vote the motion down and it's done—that's it; it's over—or you bring it up again in the future.

From what I'm understanding, there's not a desire, because of our lack of time, to have a substantive debate about this.

Mr. Brian Masse: Sorry, Mr. Chair, I have just one last quick question.

Even though I have an amendment to the motion, I cannot put an amendment to the motion.

The Chair: I go by the hands that go up, so whoever has the floor.

Mr. Brian Masse: Thank you.

The Chair: I just want to make sure that's clear with everybody. We are going to go to a vote.

Mr. Brian Masse: Can I ask for a recorded vote?

The Chair: Fair enough.

(Motion agreed to: yeas 5; nays 4)

The Chair: I will ask if you can keep...because I do want to make sure that Mr. Masse gets his time.

Mr. Dan Albas: I appreciate that, Mr. Chair.

I will just go straight to the Entertainment Software Association of Canada.

Video streaming is a huge market right now. We see twitch streamers getting viewer numbers that many TV shows would be envious of. Streamers are making money from playing a copyrighted work; however, they're also showing potential customers the work. How does the video game industry see streaming? Is it free advertising or do you believe it's copyright infringement?

Mr. Jayson Hilchie: The answer is that each company that has its content being streamed online has different policies with respect to that. Some actually partner with the streamers in order to partner in the revenue that comes from the advertising revenue that comes from that channel. Others flat out ban it, and others encourage it, as you say, because it does promote the game. You're right in that it is the copyright-protected property of the companies, but each one has its own policy for it.

Mr. Dan Albas: What is your policy on streaming of the games, as an organization?

Mr. Jayson Hilchie: My policy on streaming of games with respect to—

Mr. Dan Albas: Do you believe that the current act's provisions allow for fair use of that copyrighted material, or is it something that your members haven't given you your marching orders on?

Mr. Jayson Hilchie: Well, as I said, each member has its own policies with respect to the streaming of the TV—

Mr. Dan Albas: So you have no policy?

Mr. Jayson Hilchie: I don't have a particular policy on the streaming of games when it comes to simply playing the games. That's outside the scope of what I do.

Mr. Dan Albas: We've also heard from the music industry that they would like sound recordings used for movies or TV shows to require repeat broadcasting royalties. Obviously, some of the games that are created by many of your members are akin to almost a movie-like production. Do you know how that would affect the video game industry, and would your association oppose such a move?

Mr. Jayson Hilchie: The issue was...?

Mr. Dan Albas: It is the soundtrack recordings, because we do have musicians and people who create sounds. When these are included into a work, they are seeking further royalty every time it's rebroadcast and the sound is used.

Mr. Jayson Hilchie: Every company that licenses music for a game or creates music for a game would license that through a management or a collective or something. They would pay for that up front, typically. But with respect to—and I don't know if you're referring to the making available right, which is with respect to an issue that's currently ongoing before the Copyright Board.

● (1710)

Mr. Dan Albas: Yes, there's an exemption for sound recording, but it sounds to me as if there's an established practice in your industry of people being paid for the use of work.

Mr. Jayson Hilchie: Absolutely.

Mr. Dan Albas: Again, some artists are asking for there to be a continual stream of income from the repeated use of sound recordings.

Mr. Jayson Hilchie: Okay. The only one that I'm aware of is the current issue that's in front of the Copyright Board with respect to the making available right.

Mr. Dan Albas: In regard to the machine learning, I'm just going to throw this out to Element AI. Obviously, it sounds as if there is an unlevel playing field with Japan and the United States for the certainty that you're asking for.

We also have another group that's made a briefing available to this committee called the Canadian Legal Information Institute, which talks about the Crown copyright provision, section 12. They say that there needs to be further clarification on the use of Crown materials, for example, a government bill, a debate in Parliament and whatnot, because they can't use chat boxes to explain newer requirements or regulations or whatnot. Is this along the same lines of what you're saying, that there's not sufficient certainty for the use of machine learning, but would you also believe there needs to be certainty on the use of Crown copyright?

Mr. Paul Gagnon: I definitely believe that additional clarity can be reached under Crown copyright as well. It ties back into open data initiatives as well. If you look at licence terms that are offered by the government under open data licences, the aim is to make these things available without restriction. That isn't completely harmonized across different levels of government. Even within different datasets, different information made available by government under Crown copyright, additional clarity there definitely would be most helpful.

Mr. Dan Albas: Okay. I really wonder what the AIs would learn, though, listening to all of our debates.

The Chair: That's funny.

Mr. Dan Albas: I appreciate that. Thank you.

The Chair: We're going to move to Mr. Masse for seven minutes.

Mr. Brian Masse: Thank you, Mr. Chair, and thank you to the witnesses for being here.

I'll start with the gaming association. I think that people just think about it in terms of console gaming, but the reality is that it's a serious development with regard to everything from advertising and issues related to training and sport. South Korea, for example, has a minister of gaming. That's really where it's headed or it's already there.

You've used innovation in many respects to block some of the piracy that's taking place. The quandary, for example, with the new Spiderman, is that you can play individually and offline, but to get the full game experience that you want out of the purchase, you need to go online. That requires higher broadband speed and so forth. Can you at least provide some information on how you came about looking at a technological solution to combat piracy versus that of others who have come before the committee? They've basically asked for more enforcement.

I would point to Windsor where we used to have a lot of piracy with regard to DirecTV, for example. It was so easy to get this American channel system. Then they introduced some new measures that eliminated it.

Could you provide a little more information on what the industry has done to invest in combatting piracy with regard to innovation?

Mr. Jayson Hilchie: As I said in my opening remarks, similar to ITAC, we feel that the Copyright Act is working. We're not looking for many changes. What we are looking for is to ensure that technological protection measures and the circumvention clauses within the Copyright Act remain through any review. As you say, the technological innovation that is happening in our industry to block those who would pirate our games has been one of the reasons that we've been able to continue to grow.

TPMs could be anything from a password that would allow you to enter. It can be that simple. It can be as complicated as hardware in a console that makes copy discs unreadable—like headers on software that would identify what is an authentic copy versus an inauthentic copy. Quite frankly, in Canada we've been fortunate enough that our industry was at the centre of a Federal Court battle where Nintendo used the new law to challenge the clauses and the TPMs. They were successful in getting damages and remedies against a company that was selling what we call modchips that essentially allowed people to play copied games, and also do a number of other things to the console that it was not manufactured to do.

Quite frankly, as Mr. Troncoso said, copyright is really there to ensure that creators have an incentive to continue to make new products. For us, TPMs are one of the number one ways that we protect the creative works that we put out in order to make revenues so that we can continue to make products.

● (1715)

Mr. Brian Masse: This is not for this discussion here, but I also have some concerns with regard to loot boxes and so forth.

There are certainly a lot of positive elements in terms of transferable technology. There are lot of exciting things happening in the industry.

I used to be a board director for the CNIB, as an employment specialist when I had a real job. I used to do job accommodation including voice software and recognition. I want to make sure I understand this correctly. Are you looking to purchase one time the images and materials that have been out there, and then allow them to adapt to the technology that you're driving? I'm trying to get a full understanding and appreciation—

Mr. Christian Troncoso: I think there are an infinite number of AI possibilities and different use cases. As a general matter, we would advocate for a copyright exception that says if you have access to a work, you should be able to use a computer to analyze that work, compare it to other works and look for correlations and patterns, which can then be used to develop an AI model for future things. In your case, this would mean voice recognition. What you might need is a sort of large corpus of recorded speaking. In addition, you might also need transcripts of those recordings.

You would then train an AI system based on.... It would be a very large corpus with hundreds of thousands of hours of voice recordings and then the transcripts to create a model, so that the AI system looks for the patterns, matches the voice to the transcript, and can do it again in the future when it hears a new speech.

Mr. Brian Masse: Once your model is developed, I guess you would be concerned about having to pay a fee every time it's in play, as opposed to—

Mr. Christian Troncoso: Yes, I think that would be the concern. I think right now there's a bit of a legal grey area where a lot of this research is happening. The potential of AI is so great—it's so lucrative and it's going to be helpful to virtually every industry—that at the moment, companies' tolerance for risk may be a bit higher. I think if there were to be an adverse court decision that says, in fact, all of this is infringing, it would have really adverse impacts on Canada's investment in AI.

Mr. Brian Masse: Mr. Chair, how much time do I have?

The Chair: You have about six seconds.

Mr. Brian Masse: Thank you very much for being here.

The Chair: Thank you very much.

We're going to go to Mr. Graham. You have seven minutes.

Mr. David de Burgh Graham (Laurentides—Labelle, Lib.): Thank you.

I understand Mr. Lametti has a quick question before it comes back to me.

Mr. David Lametti (LaSalle—Émard—Verdun, Lib.): Thank you.

The question is for Mr. Hilchie.

I think you would find a lot of sympathy for using technological protection measures to protect the game itself, in particular, if you're moving to an online environment.

If the game has to be played on a particular kind of box, how far should the technological protection extend? I know you have the Federal Court decision in your favour, but should a TPM prevent you from using a box to play any kind of game? You have a physical box that perhaps might be better dealt with under the realm of patent. That's extension two. Then, extension three, should a technological protection measure be used—that same kind of protection—to prevent a farmer from amending the copyright-protected material that happens to be on his tractor, and to not be able to use it and get along with it?

At what point should we be drawing lines?

● (1720)

Mr. Jayson Hilchie: Those are two good questions.

With respect to the video game console—and again we do have the Federal Court decision in our favour—in that particular case, Nintendo was arguing that the games they make for that console should only be played on that console and that console should only play the games that they make, and vice versa.

This person was arguing that, essentially, technological protection measures through an exemption for interoperability would allow them to essentially play home-brew games or independent games on the box. There's really no position in any of the major video game console makers' business models right now that doesn't involve working with small independent developers to put content on their box. They're all very much in competition with each other. Exclusives in our industry are now a very, very big thing. If there is a game that should only be played on an Xbox, then there has been a significant financial investment to make that game an exclusive on Xbox, and I see no reason why a TPM should not protect that ability to do so.

With respect to the farmer, I don't know whether I'm qualified to answer that question, but I take your point.

Mr. David Lametti: [*Inaudible—Editor*]

Mr. Jayson Hilchie: Yes, I will.

Mr. David de Burgh Graham: Let the record show that Mr. Masse doesn't think he has a real job. That's just a point there.

I'll stay on TPMs, which Mr. Lametti has gone into at length. The fair dealing exceptions apply to a whole lot of things. There are many situations where you have fair dealing exceptions. You're asking for a new one to allow aggregate data analysis. If there's a TPM on the data, should the exception still apply? I am asking all of you who advocated for this.

Mr. Paul Gagnon: Around the exemption for information analysis is the theme of lawful access. I don't think my presentation made that clear enough, but we see lawful access as an important component of that. It's not about undercutting business models and accessing that data through illegal means or means that are not authorized.

The counterpoint to it is that we have to also make sure that the right is effective. If I'm legally accessing a work through a contract, that contract should not have a provision forbidding that informational analysis either.

I don't think the exemption that we're stating is required necessarily means that it needs to be unlawful or completely reckless access to works and data, because that would not respect the balance for the act between rights holders and users' rights.

Mr. David de Burgh Graham: If somebody produced something that has a TPM on it, that's locked, TPM definitions tell us that the fact that it's on a computer could be defined as a TPM in the first place.

My simple question is, if somebody has a TPM and you want to access that data for your analysis, should the exemption apply, or should the TPM take precedence over the fair-dealing exemption?

Mr. Paul Gagnon: I'm not aware of court cases that have resolved this issue yet. I'd tend to say that the TPM would probably mean that lawful access is not mandated.

Mr. David de Burgh Graham: Should reverse engineering itself be legal?

Mr. Paul Gagnon: I think the act provides for clear rights on reverse engineering in clear, specific settings such as for interoperability or security purposes. The act accepts that there are purposes that override this and allow for a certain form of reverse engineering.

For citizens in the digital world, these kinds of provisions are somewhat important to make sure that we're not locked into platforms we no longer can analyze or control, but in a very limited context.

Mr. David de Burgh Graham: Are there circumstances in which you believe reverse engineering should not be legal?

Mr. Paul Gagnon: The act right now strikes a good balance in identifying specific cases where reverse engineering makes sense. One example is security measures to identify the underlying security structure, and you can look to another example on interoperability. That gives consumers a good deal of.... As you saw with Mr. Lametti's question, there are still interrogations as to whether that's enough freedom, but in limited context, we can have these purposes and be able.... I wouldn't argue for a broad reverse engineering right.

Mr. David de Burgh Graham: Do we have a shortage of software programmers, people qualified to do that, in the world right now? That question is for all of you.

Mr. Paul Gagnon: In the field of AI, we definitely have a shortage of AI researchers and people skilled in the art, definitely.

Mr. David de Burgh Graham: Okay.

I worked in the high-tech industry for quite a long time. I'm still involved in it and have been for over 20 years. I've noticed that the people I'm involved with are largely the same people who I was involved with 20 years ago. What we all have in common is that we took our computers apart in the basement. We knew how the things worked. I remember using hex editors to hack games. It was fun to do.

The generation today doesn't have that access. They don't have the access to the machines, which you can't take apart anymore. Is that a problem, and can we use copyright to address it so that the next generation actually knows how these machines work and can develop into the next generation of developers?

● (1725)

Mr. Paul Gagnon: I think IP statutes, whether it is the Patent Act or the Copyright Act, do give some space for private study and research. Research exemptions under the Patent Act can allow for this type of basement hacking. Definitely the commercial exploitation of that hacking would be off-limits.

In the field of AI, we're lucky that we're really in the world of open source software. It's a very collaborative community. Ideally we can tinker out in the open and learn from that and share that knowledge with everyone else. That's a bit of a counterpoint to the basement analogy.

Mr. David de Burgh Graham: Thank you.

The Chair: Thank you very much.

We have time for a quick question from Mr. Lloyd.

Mr. Dane Lloyd: Thank you. I appreciate your coming out here today.

I have a question for the Entertainment Software Association. A lot of people are using mods these days with games. Is there any concern from your association that mods are creating copyright infringement issues?

Mr. Jayson Hilchie: When you're talking about mods, modified games, yes, absolutely there is.

Mr. Dane Lloyd: Is there a huge issue with copyright there?

Mr. Jayson Hilchie: Yes, it's essentially hacking a game. It's bypassing the anti-cirumvention.

Mr. Dane Lloyd: Would you agree that there are some legitimate uses for mods? Some mods can be creative—

Mr. Jayson Hilchie: There are actually exceptions in the copyright bill that allow for modifying games. The interoperability exception is one of them. There's also fair dealing for research and educational purposes and things like that. Those things already exist.

With respect to mods, yes, that's a massive issue for our industry.

Mr. Dane Lloyd: What if it's just for personal use and not for commercial use? Is that a concern?

Mr. Jayson Hilchie: I believe it falls within an exemption that already exists within the Copyright Act.

Mr. Dane Lloyd: So it's the commercialization of mods that's a very serious issue.

Mr. Jayson Hilchie: Absolutely. That's why we're here today, to ensure that the technological protection measures remain within the copyright bill. They work and they're extremely valuable for our industry.

Mr. Dane Lloyd: As a quick follow-up, I notice that Blizzard Entertainment just released StarCraft, a very well-known game. It's now free online. When a company makes a decision like that, they're obviously forgoing some revenue. Are those decisions possible in a universe where copyright isn't protected?

Mr. Jayson Hilchie: I'm unfamiliar with the specific game or the business model they've taken, but perhaps they're offering it for free and there are in-app purchases that will bring in revenue streams. Our industry is evolving and changing rapidly. We use numerous different business models, including subscriptions for online games and in-app purchases, things like that. I would suspect that there is some sort of business model built into that.

With respect to copyright, again, without the ability to protect the game, and have it distributed and played the way it was intended, it certainly limits the incentive for companies to continue to create and invest.

Mr. Dane Lloyd: Thank you.

The Chair: Thank you very much.

I wish we had more time, but we don't. We have to go out and do some voting, which is coming up.

Thank you, everybody.

The meeting is adjourned.

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